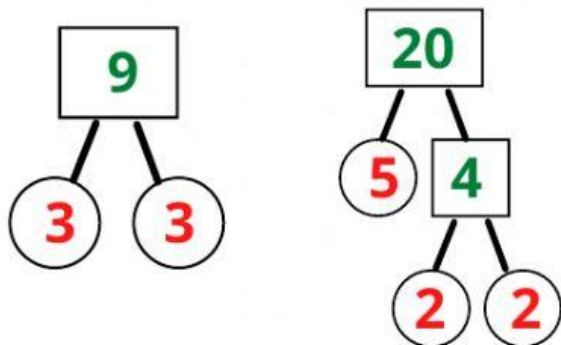


Least Common Multiple

Goal: Find the Least common multiple. Step 1: make factor trees to reduce to prime factors only. step 2 write the prime factorization. 3. Multiply to find the LCM.

a. 9 & 20



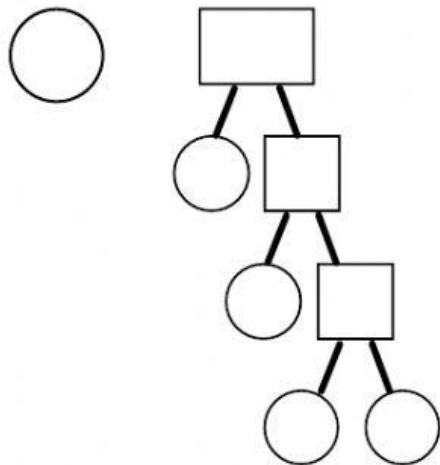
Prime factorization 9: **3×3**

Prime factorization 20: **$5 \times 2 \times 2$**

Multiply to find LCM: **$3 \times 3 \times 5 \times 2 \times 2$ or in this case 9×20**

LCM: **180**

b. 2 & 24



Prime factorization 2: _____

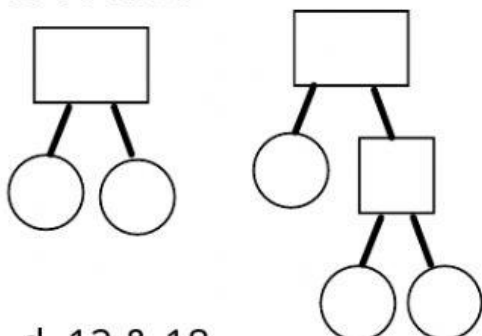
Prime factorization 24: _____

Multiply to find LCM: _____

LCM: _____

Remember: We don't always multiply all the prime factors, we look at the max times the factor is listed.

c. 10 & 30



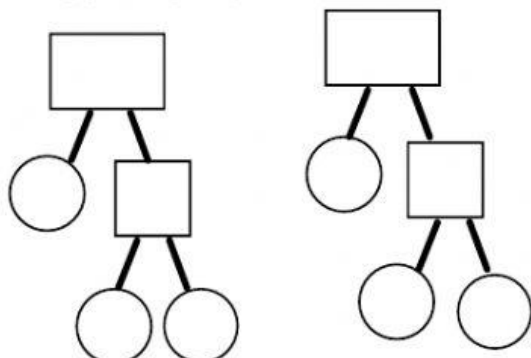
Prime factorization 10: _____

Prime factorization 30: _____

Multiply to find LCM: _____

LCM: _____

d. 12 & 18



Prime factorization 12 _____

Prime factorization 18 _____

Multiply to find LCM: _____

LCM: _____

e. 13: _____
26 _____

LCM: _____

(list the first 5 multiples of each number)

f. 4: _____

5: _____

LCM: _____

(List the first 10 multiples of each number)

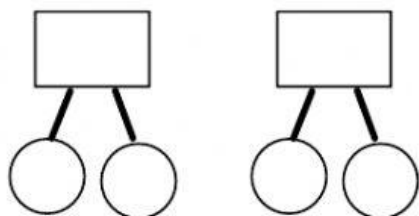
g. 8: _____

32: _____

LCM: _____

(List the first 5 multiples of each number)

h. 4 & 21



Prime factorization 4 _____

Prime factorization 21 _____

Multiply to find LCM: _____

LCM: _____

Note:

Even numbers: Sometimes the LCM will be one of the numbers itself.

Sometimes you will have to find the common multiple after making a longer list of multiples.

Odd/Even numbers: Sometimes you will multiply the two numbers being asked about to get their LCM.